

Aircraft Manufacturer Cessna Aircraft Co.

Aircraft Engine Manufacturer Continental (C145)

No. of Engines 1 Engine Rating 145 HP

Min. T/O Wt. 1.44 k-lb * Min. T/O Dist. @ Min. T/O Wt. †

* Min. T/O Dist. @ Min. T/O Wt. With Abort Dist. †

Max. T/O Wt. Peace-Time 2.2 k-lb Max. T/O Wt. War-Time 2.2 k-lb

* Min. T/O Dist. @ Max. T/O Wt. War-Time †

* Min. T/O Dist. @ Max. T/O Wt. War-Time With Abort Dist. †

Min. Ldg. Wt. 1.44 k-lb Max. Ldg. Wt. 2.2 k-lb

* Min. Ldg. Dist. @ Min. Ldg. Wt. †

* Min. Ldg. Dist. @ Max. Ldg. Wt. †

* These distances are at 59°F, at sea level, with zero runway gradient, and on a clean dry runway surface.

ACN

Weight	Rigid Pavement Subgrades				Flexible Pavement Subgrades				Very
	High <u>A</u>	Medium <u>B</u>	Low <u>C</u>	Ultra <u>D</u>	High <u>A</u>	Medium <u>B</u>	Low <u>C</u>	Low <u>D</u>	

2,200 lb/†**

** The relative structural effect of an aircraft with a weight less than 12,500 pounds is reported as maximum aircraft weight and maximum tire pressure.

Figure A-162. Cessna 170

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Aircraft Manufacturer Cessna Aircraft Co.Aircraft Engine Manufacturer Continental (O-470-R)No. of Engines 1 Engine Rating 230 HPMin. T/O Wt. 1.86 k-lb * Min. T/O Dist. @ Min. T/O Wt. †* Min. T/O Dist. @ Min. T/O Wt. With Abort Dist. †Max. T/O Wt. Peace-Time 2.8 k-lb Max. T/O Wt. War-Time 2.8 k-lb* Min. T/O Dist. @ Max. T/O Wt. War-Time 625 ft* Min. T/O Dist. @ Max. T/O Wt. War-Time With Abort Dist. †Min. Ldg. Wt. 1.86 k-lb Max. Ldg. Wt. 2.8 k-lb* Min. Ldg. Dist. @ Min. Ldg. Wt. †* Min. Ldg. Dist. @ Max. Ldg. Wt. 480 ft

* These distances are at 59°F, at sea level, with zero runway gradient, and on a clean dry runway surface.

ACN

<u>Weight</u>	<u>Rigid Pavement Subgrades</u>				<u>Flexible Pavement Subgrades</u>			
	<u>High</u> <u>A</u>	<u>Medium</u> <u>B</u>	<u>Low</u> <u>C</u>	<u>Ultra</u> <u>D</u>	<u>High</u> <u>A</u>	<u>Medium</u> <u>B</u>	<u>Low</u> <u>C</u>	<u>Very Low</u> <u>D</u>

2,800 lb/35 psi**

** The relative structural effect of an aircraft with a weight less than 12,500 pounds is reported as maximum aircraft weight and maximum tire pressure.

Figure A-163. Cessna 180, Skywagon

Aircraft Manufacturer Cessna Aircraft Co.

Aircraft Engine Manufacturer Continental (IO-520-D)

No. of Engines 1 Engine Rating 300 HP

Min. T/O Wt. 1.90 k-lb * Min. T/O Dist. @ Min. T/O Wt. †

* Min. T/O Dist. @ Min. T/O Wt. With Abort Dist. †

Max. T/O Wt. Peace-Time 3.35 k-lb Max. T/O Wt. War-Time 3.35 k-lb

* Min. T/O Dist. @ Max. T/O Wt. War-Time 770 ft

* Min. T/O Dist. @ Max. T/O Wt. War-Time With Abort Dist. †

Min. Ldg. Wt. 1.90 k-lb Max. Ldg. Wt. 3.35 k-lb

* Min. Ldg. Dist. @ Min. Ldg. Wt. †

* Min. Ldg. Dist. @ Max. Ldg. Wt. 480 ft

* These distances are at 59°F, at sea level, with zero runway gradient, and on a clean dry runway surface.

ACN

Weight	Rigid Pavement Subgrades				Flexible Pavement Subgrades			
	High A	Medium B	Low C	Ultra Low D	High A	Medium B	Low C	Very Low D

3,350 lb/35 psi**

** The relative structural effect of an aircraft with a weight less than 12,500 pounds is reported as maximum aircraft weight and maximum tire pressure.

Figure A-164. Cessna 185, Skywagon

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Aircraft Manufacturer Cessna Aircraft Co.Aircraft Engine Manufacturer Continental (R-670-23)No. of Engines 1 Engine Rating 240 HPMin. T/O Wt. 2.37 k-lb * Min. T/O Dist. @ Min. T/O Wt. †* Min. T/O Dist. @ Min. T/O Wt. With Abort Dist. †Max. T/O Wt. Peace-Time 3.35 k-lb Max. T/O Wt. War-Time 3.35 k-lb* Min. T/O Dist. @ Max. T/O Wt. War-Time †* Min. T/O Dist. @ Max. T/O Wt. War-Time With Abort Dist. †Min. Ldg. Wt. 2.37 k-lb Max. Ldg. Wt. 3.35 k-lb* Min. Ldg. Dist. @ Min. Ldg. Wt. †* Min. Ldg. Dist. @ Max. Ldg. Wt. †

* These distances are at 59°F, at sea level, with zero runway gradient, and on a clean dry runway surface.

ACN

Weight	Rigid Pavement Subgrades				Flexible Pavement Subgrades				Very Low D	
	High A	Medium B	Low C	Ultra Low D	High A	Medium B	Low C			

3,350 lb/†**

** The relative structural effect of an aircraft with a weight less than 12,500 pounds is reported as maximum aircraft weight and maximum tire pressure.

Figure A-165. Cessna 190

Aircraft Manufacturer Cessna Aircraft Co.

Aircraft Engine Manufacturer Jacobs (R-755-A2)

No. of Engines 1 Engine Rating 300 HP

Min. T/O Wt. 2.35 k-lb * Min. T/O Dist. @ Min. T/O Wt. †

* Min. T/O Dist. @ Min. T/O Wt. With Abort Dist. †

Max. T/O Wt. Peace-Time 3.35 k-lb Max. T/O Wt. War-Time 3.35 k-lb

* Min. T/O Dist. @ Max. T/O Wt. War-Time †

* Min. T/O Dist. @ Max. T/O Wt. War-Time With Abort Dist. †

Min. Ldg. Wt. 2.35 k-lb Max. Ldg. Wt. 3.35 k-lb

* Min. Ldg. Dist. @ Min. Ldg. Wt. †

* Min. Ldg. Dist. @ Max. Ldg. Wt. †

* These distances are at 59°F, at sea level, with zero runway gradient, and on a clean dry runway surface.

ACN

Weight	Rigid Pavement Subgrades				Flexible Pavement Subgrades			
	High A	Medium B	Low C	Ultra Low D	High A	Medium B	Low C	Very Low D

3,350 lb/ † **

** The relative structural effect of an aircraft with a weight less than 12,500 pounds is reported as maximum aircraft weight and maximum tire pressure.

Figure A-166. Cessna 195

27 Sep 91

Aircraft Manufacturer Helio AircraftAircraft Engine Manufacturer Lycoming (O-540-A1A5)No. of Engines 1 Engine Rating 250 HPMin. T/O Wt. 2.62 k-lb * Min. T/O Dist. @ Min. T/O Wt. †* Min. T/O Dist. @ Min. T/O Wt. With Abort Dist. †Max. T/O Wt. Peace-Time 3.4 k-lb Max. T/O Wt. War-Time 3.4 k-lb* Min. T/O Dist. @ Max. T/O Wt. War-Time 420 ft* Min. T/O Dist. @ Max. T/O Wt. War-Time With Abort Dist. †Min. Ldg. Wt. 2.62 k-lb Max. Ldg. Wt. 3.4 k-lb* Min. Ldg. Dist. @ Min. Ldg. Wt. †* Min. Ldg. Dist. @ Max. Ldg. Wt. 270 ft

* These distances are at 59°F, at sea level, with zero runway gradient, and on a clean dry runway surface.

ACN

<u>Weight</u>	<u>Rigid Pavement Subgrades</u>				<u>Flexible Pavement Subgrades</u>				<u>Very</u>
	<u>High</u> <u>A</u>	<u>Medium</u> <u>B</u>	<u>Low</u> <u>C</u>	<u>Ultra</u> <u>Low</u> <u>D</u>	<u>High</u> <u>A</u>	<u>Medium</u> <u>B</u>	<u>Low</u> <u>C</u>	<u>Low</u> <u>D</u>	

3,400 lb/28 psi**

** The relative structural effect of an aircraft with a weight less than 12,500 pounds is reported as maximum aircraft weight and maximum tire pressure.

Figure A-167. Helio H-250, Heijo Courier

Aircraft Manufacturer Helio Aircraft

Aircraft Engine Manufacturer Lycoming (GO-480-G1D6)

No. of Engines 1 Engine Rating 295 HP

Min. T/O Wt. 2.74 k-lb * Min. T/O Dist. @ Min. T/O Wt. †

* Min. T/O Dist. @ Min. T/O Wt. With Abort Dist. †

Max. T/O Wt. Peace-Time 3.4 k-lb Max. T/O Wt. War-Time 3.4 k-lb

* Min. T/O Dist. @ Max. T/O Wt. War-Time 335 ft

* Min. T/O Dist. @ Max. T/O Wt. War-Time With Abort Dist. †

Min. Ldg. Wt. 2.74 k-lb Max. Ldg. Wt. 3.4 k-lb

* Min. Ldg. Dist. @ Min. Ldg. Wt. †

* Min. Ldg. Dist. @ Max. Ldg. Wt. 270 ft

* These distances are at 59°F, at sea level, with zero runway gradient, and on a clean dry runway surface.

ACN

Weight	Rigid Pavement Subgrades				Flexible Pavement Subgrades			
	High <u>A</u>	Medium <u>B</u>	Low <u>C</u>	Ultra <u>D</u>	High <u>A</u>	Medium <u>B</u>	Low <u>C</u>	Very Low <u>D</u>

3,400 lb/28 psi**

** The relative structural effect of an aircraft with a weight less than 12,500 pounds is reported as maximum aircraft weight and maximum tire pressure.

Figure A-168. Helio H-295, Super Courier

27 Sep 91

Aircraft Manufacturer Helio AircraftAircraft Engine Manufacturer Pratt and Whitney (UACL) (PT6A-27)No. of Engines 1 Engine Rating 680 SHPMin. T/O Wt. 3.25 k-lb * Min. T/O Dist. @ Min. T/O Wt. †Min. T/O Dist. @ Min. T/O Wt. With Abort Dist. †Max. T/O Wt. Peace-Time 5.1 k-lb Max. T/O Wt. War-Time 5.1 k-lb* Min. T/O Dist. @ Max. T/O Wt. War-Time 320 ft* Min. T/O Dist. @ Max. T/O Wt. War-Time With Abort Dist. †Min. Ldg. Wt. 3.25 k-lb Max. Ldg. Wt. 5.1 k-lb* Min. Ldg. Dist. @ Min. Ldg. Wt. †* Min. Ldg. Dist. @ Max. Ldg. Wt. 250 ft

* These distances are at 59°F, at sea level, with zero runway gradient, and on a clean dry runway surface.

ACN

Weight	Rigid Pavement Subgrades				Flexible Pavement Subgrades				Very Low D
	High A	Medium B	Low C	Ultra D	High A	Medium B	Low C		

5,100 lb/22 psi**

** The relative structural effect of an aircraft with a weight less than 12,500 pounds is reported as maximum aircraft weight and maximum tire pressure.

Figure A-169. Helio HST-550, Helia Stallion

Aircraft Manufacturer Piper Aircraft Corp.

Aircraft Engine Manufacturer Lycoming (O-235-C)

No. of Engines 1 Engine Rating 104 HP

Min. T/O Wt. 1.2 k-lb * Min. T/O Dist. @ Min. T/O Wt. †

* Min. T/O Dist. @ Min. T/O Wt. With Abort Dist. †

Max. T/O Wt. Peace-Time 1.75 k-lb Max. T/O Wt. War-Time 1.75 k-lb

* Min. T/O Dist. @ Max. T/O Wt. War-Time 640 ft

* Min. T/O Dist. @ Max. T/O Wt. War-Time With Abort Dist. †

Min. Ldg. Wt. 1.2 k-lb Max. Ldg. Wt. 1.75 k-lb

* Min. Ldg. Dist. @ Min. Ldg. Wt. †

* Min. Ldg. Dist. @ Max. Ldg. Wt. 410 ft

* These distances are at 59°F, at sea level, with zero runway gradient, and on a clean dry runway surface.

ACN

Weight	Rigid Pavement Subgrades				Flexible Pavement Subgrades			
	High <u>A</u>	Medium <u>B</u>	Low <u>C</u>	Ultra <u>D</u>	High <u>A</u>	Medium <u>B</u>	Low <u>C</u>	Very Low <u>D</u>

1,750 lb/†**

** The relative structural effect of an aircraft with a weight less than 12,500 pounds is reported as maximum aircraft weight and maximum tire pressure.

Figure A-170. Piper PA-12, Super Cruiser

27 Sep 91

Aircraft Manufacturer Piper Aircraft Corp.Aircraft Engine Manufacturer Lycoming (O-235-C1)No. of Engines 1 Engine Rating 115 HPMin. T/O Wt. 1.26 k-lb * Min. T/O Dist. @ Min. T/O Wt. †* Min. T/O Dist. @ Min. T/O Wt. With Abort Dist. †Max. T/O Wt. Peace-Time 1.85 k-lb Max. T/O Wt. War-Time 1.85 k-lb* Min. T/O Dist. @ Max. T/O Wt. War-Time 720 ft* Min. T/O Dist. @ Max. T/O Wt. War-Time With Abort Dist. †Min. Ldg. Wt. 1.26 k-lb Max. Ldg. Wt. 1.85 k-lb* Min. Ldg. Dist. @ Min. Ldg. Wt. †* Min. Ldg. Dist. @ Max. Ldg. Wt. 470 ft

* These distances are at 59°F, at sea level, with zero runway gradient, and on a clean dry runway surface.

ACN

Weight	Rigid Pavement Subgrades				Flexible Pavement Subgrades				Very
	High A	Medium B	Low C	Low D	High A	Medium B	Low C	Low D	

1,850 lb/†**

** The relative structural effect of an aircraft with a weight less than 12,500 pounds is reported as maximum aircraft weight and maximum tire pressure.

Figure A-171. Piper PA-14, Family Cruiser

Aircraft Manufacturer Piper Aircraft Corp.

Aircraft Engine Manufacturer Lycoming (O-145)

No. of Engines 1 Engine Rating 65 HP

Min. T/O Wt. 0.87 k-lb * Min. T/O Dist. @ Min. T/O Wt. †

* Min. T/O Dist. @ Min. T/O Wt. With Abort Dist. †

Max. T/O Wt. Peace-Time 1.1 k-lb Max. T/O Wt. War-Time 1.1 k-lb

* Min. T/O Dist. @ Max. T/O Wt. War-Time 900 ft

* Min. T/O Dist. @ Max. T/O Wt. War-Time With Abort Dist. †

Min. Ldg. Wt. 0.87 k-lb Max. Ldg. Wt. 1.1 k-lb

* Min. Ldg. Dist. @ Min. Ldg. Wt. †

* Min. Ldg. Dist. @ Max. Ldg. Wt. 300 ft

* These distances are at 59°F, at sea level, with zero runway gradient, and on a clean dry runway surface.

ACN

Weight	Rigid Pavement Subgrades				Flexible Pavement Subgrades				Very
	High <u>A</u>	Medium <u>B</u>	Low <u>C</u>	Low <u>D</u>	High <u>A</u>	Medium <u>B</u>	Low <u>C</u>	Low <u>D</u>	

1,100 lb/†**

** The relative structural effect of an aircraft with a weight less than 12,500 pounds is reported as maximum aircraft weight and maximum tire pressure.

Figure A-172. Piper PA-15, Vagabond

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Aircraft Manufacturer Piper Aircraft Corp.Aircraft Engine Manufacturer Lycoming (O-320)No. of Engines 1 Engine Rating 150 HPMin. T/O Wt. 1.17 k-lb * Min. T/O Dist. @ Min. T/O Wt. †* Min. T/O Dist. @ Min. T/O Wt. With Abort Dist. †Max. T/O Wt. Peace-Time 1.75 k-lb Max. T/O Wt. War-Time 1.75 k-lb* Min. T/O Dist. @ Max. T/O Wt. War-Time 200 ft* Min. T/O Dist. @ Max. T/O Wt. War-Time With Abort Dist. †Min. Ldg. Wt. 1.17 k-lb Max. Ldg. Wt. 1.75 k-lb* Min. Ldg. Dist. @ Min. Ldg. Wt. †* Min. Ldg. Dist. @ Max. Ldg. Wt. 350 ft

* These distances are at 59°F, at sea level, with zero runway gradient, and on a clean dry runway surface.

ACN

<u>Weight</u>	<u>Rigid Pavement Subgrades</u>				<u>Flexible Pavement Subgrades</u>			
	<u>High</u>	<u>Medium</u>	<u>Low</u>	<u>Ultra</u>	<u>High</u>	<u>Medium</u>	<u>Low</u>	<u>Very Low</u>
<u>A</u>	<u>B</u>	<u>C</u>	<u>D</u>	<u>A</u>	<u>B</u>	<u>C</u>	<u>D</u>	

1,750 lb/18 psi**

** The relative structural effect of an aircraft with a weight less than 12,500 pounds is reported as maximum aircraft weight and maximum tire pressure.

Figure A-173. Piper PA-18, Super Cub

Aircraft Manufacturer Piper Aircraft Corp.

Aircraft Engine Manufacturer Lycoming (O-290-D)

No. of Engines 1 Engine Rating 125 HP

Min. T/O Wt. 1.21 k-lb * Min. T/O Dist. @ Min. T/O Wt. †

* Min. T/O Dist. @ Min. T/O Wt. With Abort Dist. †

Max. T/O Wt. Peace-Time 1.8 k-lb Max. T/O Wt. War-Time 1.8 k-lb

* Min. T/O Dist. @ Max. T/O Wt. War-Time †

* Min. T/O Dist. @ Max. T/O Wt. War-Time With Abort Dist. †

Min. Ldg. Wt. 1.21 k-lb Max. Ldg. Wt. 1.8 k-lb

* Min. Ldg. Dist. @ Min. Ldg. Wt. †

* Min. Ldg. Dist. @ Max. Ldg. Wt. †

* These distances are at 59°F, at sea level, with zero runway gradient, and on a clean dry runway surface.

ACN

Weight	Rigid Pavement Subgrades				Flexible Pavement Subgrades				
	High A	Medium B	Low C	Low D	Ultra	High A	Medium B	Low C	Very Low D

1,800 lb/†**

** The relative structural effect of an aircraft with a weight less than 12,500 pounds is reported as maximum aircraft weight and maximum tire pressure.

Figure A-174. Piper PA-20, Pacer

27 Sep 91

Aircraft Manufacturer Silvaire Aircraft Co.

Aircraft Engine Manufacturer Continental (C90-12F)

No. of Engines 1 Engine Rating 90 HP

Min. T/O Wt. 1.09 k-lb * Min. T/O Dist. @ Min. T/O Wt. †

* Min. T/O Dist. @ Min. T/O Wt. With Abort Dist. †

Max. T/O Wt. Peace-Time 1.4 k-lb Max. T/O Wt. War-Time 1.4 k-lb

* Min. T/O Dist. @ Max. T/O Wt. War-Time 550 ft

* Min. T/O Dist. @ Max. T/O Wt. War-Time With Abort Dist. †

Min. Ldg. Wt. 1.09 k-lb Max. Ldg. Wt. 1.4 k-lb

* Min. Ldg. Dist. @ Min. Ldg. Wt. †

* Min. Ldg. Dist. @ Max. Ldg. Wt. 450 ft

* These distances are at 59°F, at sea level, with zero runway gradient, and on a clean dry runway surface.

ACN

<u>Weight</u>	<u>Rigid Pavement Subgrades</u>				<u>Flexible Pavement Subgrades</u>			
	<u>High</u> <u>A</u>	<u>Medium</u> <u>B</u>	<u>Low</u> <u>C</u>	<u>Ultra Low</u> <u>D</u>	<u>High</u> <u>A</u>	<u>Medium</u> <u>B</u>	<u>Low</u> <u>C</u>	<u>Very Low</u> <u>D</u>

1,400 lb/†**

** The relative structural effect of an aircraft with a weight less than 12,500 pounds is reported as maximum aircraft weight and maximum tire pressure.

Figure A-175. Silvaire 8

Aircraft Manufacturer Taylorcraft Aviation Corp.

Aircraft Engine Manufacturer Avco Lycoming (O-235-L2C)

No. of Engines 1 Engine Rating 118 HP

Min. T/O Wt. 1.18 k-lb * Min. T/O Dist. @ Min. T/O Wt. †

* Min. T/O Dist. @ Min. T/O Wt. With Abort Dist. †

Max. T/O Wt. Peace-Time 1.5 k-lb Max. T/O Wt. War-Time 1.5 k-lb

* Min. T/O Dist. @ Max. T/O Wt. War-Time 275 ft

* Min. T/O Dist. @ Max. T/O Wt. War-Time With Abort Dist. †

Min. Ldg. Wt. 1.18 k-lb Max. Ldg. Wt. 1.5 k-lb

* Min. Ldg. Dist. @ Min. Ldg. Wt. †

* Min. Ldg. Dist. @ Max. Ldg. Wt. 350 ft
(From 50 ft)

* These distances are at 59°F, at sea level, with zero runway gradient, and on a clean dry runway surface.

ACN

Weight	Rigid Pavement Subgrades				Flexible Pavement Subgrades			
					Very			
	High <u>A</u>	Medium <u>B</u>	Low <u>C</u>	Low <u>D</u>	High <u>A</u>	Medium <u>B</u>	Low <u>C</u>	Low <u>D</u>
1,500 lb/†**								

** The relative structural effect of an aircraft with a weight less than 12,500 pounds is reported as maximum aircraft weight and maximum tire pressure.

Figure A-176. Taylorcraft F-21

27 Sep 91

Aircraft Manufacturer Univair Aircraft Corp.Aircraft Engine Manufacturer Avco Lycoming (IO-360-A1A)No. of Engines 1 Engine Rating 200 HPMin. T/O Wt. 1.57 k-lb * Min. T/O Dist. @ Min. T/O Wt. †* Min. T/O Dist. @ Min. T/O Wt. With Abort Dist. †Max. T/O Wt. Peace-Time 2.4 k-lb Max. T/O Wt. War-Time 2.4 k-lb* Min. T/O Dist. @ Max. T/O Wt. War-Time 400 ft* Min. T/O Dist. @ Max. T/O Wt. War-Time With Abort Dist. †Min. Ldg. Wt. 1.57 k-lb Max. Ldg. Wt. 2.4 k-lb* Min. Ldg. Dist. @ Min. Ldg. Wt. †* Min. Ldg. Dist. @ Max. Ldg. Wt. 300 ft

* These distances are at 59°F, at sea level, with zero runway gradient, and on a clean dry runway surface.

ACN

Weight	Rigid Pavement Subgrades				Flexible Pavement Subgrades			
	High A	Medium B	Low C	Ultra D	High A	Medium B	Low C	Very Low D

2,400 lb/20 psi**

** The relative structural effect of an aircraft with a weight less than 12,500 pounds is reported as maximum aircraft weight and maximum tire pressure.

Figure A-177. Univair 108, Stinson

Aircraft Manufacturer Bede Aircraft, Inc.

Aircraft Engine Manufacturer Lycoming (0-360)

No. of Engines 1 Engine Rating 180 HP

Min. T/O Wt. 1.41 k-lb * Min. T/O Dist. @ Min. T/O Wt. †

* Min. T/O Dist. @ Min. T/O Wt. With Abort Dist. †

Max. T/O Wt. Peace-Time 1.95 k-lb Max. T/O Wt. War-Time 1.95 k-lb

* Min. T/O Dist. @ Max. T/O Wt. War-Time 600 ft

* Min. T/O Dist. @ Max. T/O Wt. War-Time With Abort Dist. †

Min. Ldg. Wt. 1.41 k-lb Max. Ldg. Wt. 1.95 k-lb

* Min. Ldg. Dist. @ Min. Ldg. Wt. †

* Min. Ldg. Dist. @ Max. Ldg. Wt. 600 ft

* These distances are at 59°F, at sea level, with zero runway gradient, and on a clean dry runway surface.

ACN

Weight	Rigid Pavement Subgrades				Flexible Pavement Subgrades				
	High <u>A</u>	Medium <u>B</u>	Low <u>C</u>	Low <u>D</u>	Ultra	High <u>A</u>	Medium <u>B</u>	Low <u>C</u>	Very Low <u>D</u>

1,950 lb/†**

** The relative structural effect of an aircraft with a weight less than 12,500 pounds is reported as maximum aircraft weight and maximum tire pressure.

Figure A-178. Bede BD-4

27 Sep 91

Aircraft Manufacturer Cessna Aircraft Co.Aircraft Engine Manufacturer Continental (O-200-A)No. of Engines 1 Engine Rating 100 HPMin. T/O Wt. 1.22 k-lb * Min. T/O Dist. @ Min. T/O Wt. †* Min. T/O Dist. @ Min. T/O Wt. With Abort Dist. †Max. T/O Wt. Peace-Time 1.60 k-lb Max. T/O Wt. War-Time 1.60 k-lb* Min. T/O Dist. @ Max. T/O Wt. War-Time 735 ft* Min. T/O Dist. @ Max. T/O Wt. War-Time With Abort Dist. †Min. Ldg. Wt. 1.22 k-lb Max. Ldg. Wt. 1.60 k-lb* Min. Ldg. Dist. @ Min. Ldg. Wt. †* Min. Ldg. Dist. @ Max. Ldg. Wt. 445 ft

* These distances are at 59°F, at sea level, with zero runway gradient, and on a clean dry runway surface.

ACN

<u>Weight</u>	Rigid Pavement Subgrades				Flexible Pavement Subgrades			
					Very			
	High <u>A</u>	Medium <u>B</u>	Low <u>C</u>	Low <u>D</u>	High <u>A</u>	Medium <u>B</u>	Low <u>C</u>	Low <u>D</u>
1,600 lb/30 psi**								

** The relative structural effect of an aircraft with a weight less than 12,500 pounds is reported as maximum aircraft weight and maximum tire pressure.

Figure A-179. Cessna 150

Aircraft Manufacturer Cessna Aircraft Co.

Aircraft Engine Manufacturer Lycoming (O-320-E2D)

No. of Engines 1 Engine Rating 150 HP

Min. T/O Wt. 1.49 k-lb * Min. T/O Dist. @ Min. T/O Wt. †

* Min. T/O Dist. @ Min. T/O Wt. With Abort Dist. †

Max. T/O Wt. Peace-Time 2.30 k-lb Max. T/O Wt. War-Time 2.30 k-lb

* Min. T/O Dist. @ Max. T/O Wt. War-Time 865 ft

* Min. T/O Dist. @ Max. T/O Wt. War-Time With Abort Dist. †

Min. Ldg. Wt. 1.49 k-lb Max. Ldg. Wt. 2.30 k-lb

* Min. Ldg. Dist. @ Min. Ldg. Wt. †

* Min. Ldg. Dist. @ Max. Ldg. Wt. 520 ft

* These distances are at 59°F, at sea level, with zero runway gradient, and on a clean dry runway surface.

ACN

Weight	Rigid Pavement Subgrades				Flexible Pavement Subgrades			
	High A	Medium B	Low C	Low D	Ultra	High A	Medium B	Low C

2,300 lb/23 psi**

** The relative structural effect of an aircraft with a weight less than 12,500 pounds is reported as maximum aircraft weight and maximum tire pressure.

Figure A-180. Cessna 172, Skyhawk

27 Sep 91

Aircraft Manufacturer Cessna Aircraft Co.Aircraft Engine Manufacturer Lycoming (O-360-A1F)No. of Engines 1 Engine Rating 180 HPMin. T/O Wt. 1.70 k-lb * Min. T/O Dist. @ Min. T/O Wt. †* Min. T/O Dist. @ Min. T/O Wt. With Abort Dist. †Max. T/O Wt. Peace-Time 2.50 k-lb Max. T/O Wt. War-Time 2.50 k-lb* Min. T/O Dist. @ Max. T/O Wt. War-Time 845 ft* Min. T/O Dist. @ Max. T/O Wt. War-Time With Abort Dist. †Min. Ldg. Wt. 1.70 k-lb Max. Ldg. Wt. 2.50 k-lb* Min. Ldg. Dist. @ Min. Ldg. Wt. †* Min. Ldg. Dist. @ Max. Ldg. Wt. 435 ft

* These distances are at 59°F, at sea level, with zero runway gradient, and on a clean dry runway surface.

ACN

<u>Weight</u>	Rigid Pavement Subgrades				Flexible Pavement Subgrades			
	High <u>A</u>	Medium <u>B</u>	Low <u>C</u>	Low <u>D</u>	Ultra	High <u>A</u>	Medium <u>B</u>	Low <u>C</u>

2,500 lb/30 psi**

** The relative structural effect of an aircraft with a weight less than 12,500 pounds is reported as maximum aircraft weight and maximum tire pressure.

Figure A-181. Cessna 177, Cardinal